FACT SHEET FOR NPDES PERMIT WA-003192-5

CENTRAL PUGET SOUND TRANSIT AUTHORITY

This fact sheet is a companion document to National Pollutant Discharge Elimination System (NPDES) Permit No. WA-003192-5. This permit is issued to the Central Puget Sound Transit Authority to allow the discharge of stormwater and dewatering water associated with construction activity to the receiving waters listed below under General Information. This fact sheet establishes the basis for requirements that are included in the permit.

GENERAL INFORMATION

Applicant:	Central Puget Sound Transit Authority Union Station 401 South Jackson Street Seattle, WA 98104-2826
Site Name and Address:	Central Puget Sound Light Rail System Linear Pathway between Convention Place in Seattle through downtown Seattle and the Rainier Valley to South 154th Street within the City of Tukwila
Type of Facility:	Construction Activity
Receiving Water and Water Body I.D. Nos.:	Fresh

(i)	Duwamish River	WA-09-1010
(ii)	Lake Washington	WA-08-9350
(iii)	Southgate Creek	WA-09-1010*
(iv)	Northwest Gilliam Tributary	WA-09-1010*
(v)	Gilliam Creek	WA-09-1010*
(vi)	Green River	WA-09-1020

* Streams without individual Water Body I.D. numbers are assigned the number of the water body of which it is tributary to.

TABLE OF CONTENTS

INTRODUCTION

The Federal Clean Water Act (FCWA, 1972, and later modifications, 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System (NPDES) system of permits, which is administered by the Environmental Protection Agency (EPA). EPA has delegated responsibility to administer the NPDES permit program to the state of Washington on the basis of Chapter 90.48 RCW, which defines the Department of Ecology's authority and obligations in administering the wastewater discharge permit program.

Regulations adopted by the state include procedures for issuing permits (Chapter 173-220 WAC), water quality criteria for surface and ground waters (Chapters 173-201A and 200 WAC), and sediment management standards (Chapter 173-204 WAC). These regulations require that a permit be issued before discharge of wastewater to waters of the state is allowed. The regulations also establish the basis for effluent limitations and other requirements which are to be included in the permit. One of the requirements (WAC 173-220-060) for issuing a permit under the NPDES permit program is the preparation of a draft permit and an accompanying fact sheet. Public notice of the availability of the draft permit is required at least thirty (30) days before the permit is issued (WAC 173-220-050). The fact sheet and draft permit are available for review. Details on the public notice procedures are contained in Appendix A of the fact sheet. Definitions for both the permit and fact sheet are contained in Appendix B of the fact sheet.

The draft permit and fact sheet were reviewed by the Permittee. Errors and omissions identified in this review were corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. Comments, responses, and the resultant changes to the permit and fact sheet will be summarized in Appendix C. Parties that submit comments will receive a copy of the final permit and fact sheet.

BACKGROUND

DESCRIPTION OF THE PROJECT

The Central Link Project

Sound Transit is planning to construct and operate a light rail system known as the Central Link light rail project (Central Link Project). The Central Link Project is a light rail line that will connect the cities of Seattle, Tukwila, and SeaTac and is comprised of six segments: Segment A, Northgate to University District; Segment B, University District to Westlake Station; Segment C, Westlake Station to South McClellan Street; Segment D, South McClellan Street to Boeing Access Road; Segment E, Boeing Access Road to SR-518 (Tukwila); and Segment F, SR-518, through SeaTac International Airport to South 200th Street (SeaTac) (see attached map).

The Central Link Project was evaluated in a Final Environmental Impact Statement (FEIS), which was issued in November of 1999. The Federal Transportation Administration (FTA) issued its Final Record of Decision (ROD) on January 5, 2000. Following the issuance of the FEIS, the Sound Transit Board selected a 21-mile alignment that would provide light rail service between NE 45th Street in Seattle and South 200th Street in the city of SeaTac, station locations, and the maintenance base site to be built (original project).

In November 2001, Sound Transit and FTA issued the Central Link Light Rail Transit Project Final Supplemental Impact Statement-Tukwila Freeway Route (Tukwila Final SEIS). The Tukwila Final SEIS evaluates the Tukwila Freeway Route, a new alternative for that portion of the project located between south Seattle and the city of Tukwila.

The Sound Transit Board has decided to develop the Central Link Project in segments rather than the full 21-mile project. On November 29, 2001, the Sound Transit Board selected the Initial Segment and formally revised the adopted project (Resolution R2001-103). The Initial Segment will provide light rail service over a 14-mile alignment running between Convention Place in Downtown Seattle (with an interim northern rail terminus for rail passengers at Westlake Station) and an interim southern rail terminus at South 154th Street near SeaTac Airport. Shuttle bus service between the South 154th Street Station and SeaTac Airport will also be provided as part of the Initial Segment. The FTA issued an Amended ROD for the Initial Segment on May 8, 2002.

The Initial Segment is a subpart of the original project, as modified by the inclusion of the Tukwila Freeway Route. Between Convention Place and the Boeing Access Road, the Initial Segment follows the alignment and station locations used in the original project; from the Boeing Access Road to South 154th Street, the Initial Segment follows the Tukwila Freeway Route. The Initial Segment provides for construction of the Beacon Hill Station, a station deferred by the Sound Transit Board in selecting the original project, and deferral of the Boeing Access Road Station. The Initial Segment also includes the use of joint bus/rail operations in the Downtown Seattle Transit Tunnel, a revised systems operations plan, and design refinements made by Sound Transit in the course of final design to that portion of the Central Link Project located between the Beacon Hill and Henderson Street stations in south Seattle.

The Initial Segment-Route Details

As described above, the northern terminus of the 14-mile Initial Segment begins at Convention Place in Downtown Seattle and then enters the King County-Metro bus tunnel (Downtown Seattle Transit Tunnel). The route resurfaces at the south end of the Downtown Seattle Transit Tunnel and runs along the east side of the King County Metro bus roadway (known as the E-3 Busway) for about 1 mile. The route transitions into an elevated structure, turning east at South Forest Street and continuing along the south side of South Forest Street to Beacon Hill, for about 0.5 mile. The route then goes underground through Beacon Hill for about 1 mile, resurfaces, and proceeds southerly in an elevated profile for about 0.5 mile. The route transitions to an at-grade and proceeds south through the Rainier Valley area for about 4.5 miles to South Norfolk Street.

At South Norfolk Street, the route enters the city of Tukwila, transitioning into elevated structure for about 2 miles. The route traverses Interstate 5 and proceeds west over the BNSF/UP railroad tracks, running south of, and parallel to, the Boeing Access Road. Near East Marginal Way South, the alignment turns south and proceeds on aerial structure along the west side of East Marginal Way South. Continuing south, the aerial track-way crosses over the frontage of the Ray-Carrossino Farmstead. From here, the alignment crosses the Duwamish River on a new long-span bridge with supports located outside the 100-year flood limits. The alignment continues south on an aerial structure, crossing over East Marginal Way South and SR-599 and along the west side of SR-599. After crossing over the on-ramp from the King County Metro bus maintenance base located at 12000 E Marginal Way S Tukwila, the alignment descends to a retained cut/fill configuration. This configuration allows a 22-foot wide separation between the edge of the pavement of SR-599 and the LRT retaining walls, to allow for future road widening.

The alignment proceeds south along SR-599, crossing over 42nd Avenue South and the SR-599 off- and on-ramps to South 133rd Street. From here, the alignment continues south in a retained cut/fill configuration joining the I-5 right-of-way on the west side. At the South 144th Street over-crossing of I-5, the alignment passes under the bridge requiring the removal and reconstruction of the bridge end slope. Near South 151st Street, the alignment ascends to an elevated configuration and turns west. The alignment then crosses over 52nd and 50th Avenues South and continues west within the SR-518 right-of-way on elevated structures varying in height from 40 to 80 feet. Near the existing Ajax parking lot, the alignment turns north and leaves the SR-518 right-of-way to accommodate the Washington State Department of Transportation's proposed reconstruction of the SR-518/SR-99 interchange.

Crossover tracks will be required along the Tukwila Freeway Route. The crossover locations will be located east of the 154th Station platform in the city of Tukwila and in the tangent section just north of South 133rd Street in the city of Tukwila.

Station Locations

As part of the Initial Segment, light rail passenger stations will be provided at the following locations: Westlake, University Street, Pioneer Square, the International District, Lander, Beacon Hill, McClellan S, Edmunds, Othello, Henderson, and South 154th Street. The South 154th Street Station will be constructed on the site of the existing Ajax Parking Lot and will include a 466-stall park-and-ride lot. The stations to be located at Royal Brougham, Graham, and Boeing Access Road are currently deferred. As discussed above, shuttle bus service between the South 154th Street Station and SeaTac Airport will be provided as part of the Initial Segment.

Maintenance Base

The Operations and Maintenance (O&M) Facility will serve as the light rail transit (LRT) center for administration, operations, central control, reporting, dispatch, and light rail vehicle (LRV) and systems maintenance and repair for the Central Link Project. It is located on a rectangular site of approximately 25 acres that is situated in the SODO industrial district. The site is bounded to the north by South Forest Street, to the east and south by Airport Way South, and to the west by the Alaskan Copper Company property along Sixth Avenue. Soil and groundwater contamination identified on the northwest corner of the maintenance base site will be remediated in accordance with the Cleanup Action Plan developed for the property under the Voluntary Cleanup Program of the Model Toxics Control Act.

The site infrastructure and activities are best described as commercial/light industrial. Development on the site will include the following: a main building that will house LRV maintenance and operations activities, a vehicle wash facility attached to the main building, a yard substation building, a main line substation building, and other smaller buildings for signals and communications equipment. Site plans also include the future development of a secondary building consisting of approximately 16,324 square feet. The maintenance of way building will serve as a base for the light rail maintenance workers who perform repairs on the track-way, substations, and other transit-way facilities.

The main building, which will cover approximately 80,000 square feet, will house shop areas for maintenance of an initial 40-car Light Rail Vehicle (LRV) fleet with the potential for expansion to a 100 LRV capacity. It will include a four-story section that will accommodate other functions needed to support the operation and maintenance of the LRT system. These include the following: electrical repair areas, signal and communication labs, administrative offices, and storage.

Track-work on the site will include both open (tie and ballast) racks in the storage yard and paved tracks adjacent to the building and at road crossings. Surface parking will be provided for employees and visitors. The site will include open LRV storage areas and landscaping, as appropriate, and will be fenced. The development will have one public driveway entrance and a second entrance for emergency and maintenance purposes. It is intended that all personnel associated with the initial Sound Transit Central Link LRT system operations, including administrative, supervisory, managerial, operations, security, and system-wide maintenance personnel, will report to and be dispatched from the facility.

DESCRIPTION OF THE RECEIVING WATER

Lake Washington is designated as a Lake Class receiving water. Potential characteristic uses of Lake Class waters include the following:

> water supply (domestic, industrial, agricultural); stock watering; fish migration; fish and shellfish rearing, spawning and harvesting; wildlife habitat; primary contact recreation; sport fishing; boating and aesthetic enjoyment; commerce and navigation.

Duwamish River is designated as Class B receiving water. Potential characteristic uses of Class B waters include the following:

> water supply (industrial, agricultural); stock watering; fish migration; fish and shellfish rearing, spawning and harvesting; wildlife habitat; secondary contact recreation; sport fishing; boating and aesthetic enjoyment; commerce and navigation.

Green River, Gilliam Creek, and Southgate Creek are designated Class A receiving waters. Potential characteristic uses of Class A waters include the following:

> water supply (domestic, industrial, agricultural); stock watering; fish migration; fish and shellfish rearing, spawning and harvesting; wildlife habitat; primary contact recreation; sport fishing; boating and aesthetic enjoyment; commerce and navigation.

PROPOSED PERMIT LIMITATIONS

Federal and state regulations require that effluent limitations set forth in an NPDES permit must be either technology- or water quality-based. Technology-based limitations are based upon the treatment methods available to treat specific pollutants. Technology-based limitations are set by regulation or developed on a case-by-case basis (40 CFR 125.3, and Chapter 173-220 WAC). Water quality-based limitations are based upon compliance with the Surface Water Quality Standards (Chapter 173-201A WAC), Ground Water Standards (Chapter 173-200 WAC), Sediment Quality Standards (Chapter 173-204 WAC) or the National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992). Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

Discharges of stormwater must meet all applicable provisions of Sections 301 and 402 of the Clean Water Act (CWA). These provisions require control of pollutant discharges to a level equivalent to Best Available Technology Economically Achievable (BAT) for toxic and unconventional pollutants, Best Conventional Pollutant Control Technology (BCT) for conventional pollutants, and any more stringent limitations necessary to meet water quality standards. In addition, state law requires discharges to apply all known, available, and reasonable methods of prevention and treatment (AKART) to prevent and control the pollution of the waters of the state of Washington. State law also requires any other more stringent limitations necessary to meet all applicable state standards.

The effluent limitations in the permit are narrative. The permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) which includes Best Management Practices (BMPs) to prevent the pollution of stormwater and to reduce the amount of pollutants discharged. Development of the SWPPP and implementation of BMPs constitutes implementation of BAT, BCT, and AKART.

The Permittee is required to use Ecology's Stormwater Management Manual for Western Washington (SWMM) (or an equivalent manual) to make a judgment of which BMPs are necessary to achieve compliance with the BAT and BCT requirements of the CWA, as well as the AKART requirements of state law. The SWPPP must include a description of stabilization and structural practices to be used at the site to minimize erosion and the movement of sediments on and from the site. The SWPPP will be submitted to the Department for review.

The discharge of process wastewater, domestic wastewater, or non-contact cooling water to a storm drain or surface water is prohibited. Illicit discharges are not authorized, including spills of oil or hazardous substances, and obligations under state and federal laws and regulations pertaining to those discharges apply.

SURFACE WATER QUALITY-BASED EFFLUENT LIMITATIONS

The stormwater discharges associated with construction activity and dewatering allowed under this permit are subject to all applicable state water quality and sediment management standards. The permit does not authorize the violation of those standards. The Department expects that the selection and implementation of appropriate BMPs outlined in the SWMM, or equivalent manuals, will result in compliance with standards for stormwater discharges from construction sites. Erosion and sediment control planning guidance and design criteria for BMPs to control stormwater run-off quantity, erosion, and sediments as well as other pollutants are provided in the SWMM. Proper implementation and maintenance of these controls should be all that is necessary to adequately control any adverse water quality impacts from construction activity.

When the construction site is not in compliance with these standards, the Permittee shall take immediate action(s) to achieve compliance by implementing additional BMPs and/or improved maintenance of existing BMPs.

In the event that conventional BMPs prove to be inadequate to protect water quality standards, chemical treatment of stormwater and dewatering water may be authorized by Ecology. Chemical treatment of stormwater and/or dewatering water will only be authorized upon Ecology's approval of a Supplement to the SWPPP which details the process and procedures of the proposed chemical treatment. The chemical treatment design shall meet or exceed the specifications in Ecology's August 2001 *Final Stormwater Management Manual* for Western Washington.

MIXING ZONES

The Water Quality Standards allow the Department of Ecology to authorize mixing zones around a point of discharge in establishing surface water quality-based effluent limits. Both "acute" and "chronic" mixing zones may be authorized for pollutants that can have a toxic effect on the aquatic environment near the point of discharge. The concentration of pollutants at the boundary of these mixing zones may not exceed the numerical criteria for that type of zone. Mixing zones can only be authorized for discharges that are receiving AKART and in accordance with other mixing zone requirements of WAC 173-201A-100.

Mixing zones are sized for the pollutant with the largest potential to violate water quality standards. Stormwater discharges from construction sites have historically resulted in violations of state standards for turbidity due to the release of suspended solids. The following is a summary of the factors that must be considered in determining whether a mixing zone should be authorized for a particular discharge:

(1) A discharger shall be required to fully apply all known available and reasonable methods to prevent and control pollution (AKART) prior to being authorized a mixing zone. In this case, as discussed above, an adequate SWPPP and implementation are considered compliance with AKART.

(2) Mixing zone determinations shall consider critical discharge conditions.

(3) The mixing zone will not cause a loss of sensitive or important habitat.

(4) Water quality standards will not be violated outside of the boundary of the mixing zone.

(5) The size of a mixing zone and the concentrations of pollutants shall be minimized.

(6) The size of a mixing zone shall consider the following:

The overlap of adjacent mixing zones; discharge and receiving water flow; width of the receiving water; downstream and upstream conditions; and depth of water over the discharge port(s).

A mixing zone has not been specified in the permit. The Department will establish the point of compliance in the receiving water through the review and approval of the Construction Stormwater/Dewatering Monitoring Plan required in Special Condition S3.A. Available dilution and background conditions in the receiving water will be considered. A mixing zone will only be considered when an adequate SWPPP has been prepared and implemented.

SURFACE WATER QUALITY CRITERIA

Applicable criteria are defined in Chapter 173-201A WAC for aquatic biota. In addition, U.S. EPA has promulgated human health criteria for toxic pollutants (EPA, 1992). Pollutants that might be expected in the discharge from railway and station construction activities are: turbidity, pH, and petroleum products. Pollutants that have been documented at the maintenance base are: cadmium, chromium, copper, lead, nickel, zinc, PCB's, vinyl chloride, and polynuclear aromatic hydrocarbons.

The water quality standards for turbidity and pH for Lake Class and AA waters are:

Turbidity: shall not exceed 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU.

pH: shall be within the range of 6.5 to 8.5 (freshwater) or 7.0 to 8.5 (marine water) with a human-caused variation within a range of less than 0.2 units.

The water quality standards for turbidity and pH for Class B waters are:

Turbidity: shall not exceed 10 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 20 percent increase in turbidity when the background turbidity is more than 50 NTU.

pH: shall be within the range of 6.5 to 8.5 (freshwater) or 7.0 to 8.5 (marine water) with a human-caused variation within a range of less than 0.2 units.

The acute marine water quality standards for the following metals are:

Cadmium, Total Recoverable	42 μg/L
Chromium, Total Recoverable	10.4 mg/L
Copper, Total Recoverable	5.8 μg/L
Lead, Total Recoverable	221 μg/L
Nickel, Total Recoverable	75 μg/L
Zinc, Total Recoverable	95 μg/L

The acute marine water quality standard for polychlorinated biphenyls (PCBs) is 10 μg/L.

Although there is no specific water quality standard for petroleum products, the hazardous waste rules under RCW 90.56 have been interpreted under RCW 90.48 to disallow visible sheen.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are required (WAC 173-220-210 and 40 CFR 122.41) to verify that the BMPs are functioning correctly and that the water quality criteria are not being violated in the receiving water.

The Permittee is required to submit a Construction Stormwater/Dewatering Monitoring Plan annually on or before March 1st. The purpose of the monitoring plan is to assess compliance with the water quality standards in each water body that will receive stormwater discharge during the following year. In addition to monitoring for the conventional construction site pollutants of turbidity, pH, and total petroleum hydrocarbons, the permit requires monitoring for known and suspected soil contaminants at the maintenance base. The parameters monitored at the maintenance base in addition to the conventional parameters include: cadmium, chromium, copper, lead, nickel, zinc, volatile organics, polynuclear aromatic hydrocarbons, and PCBs.

The Permittee shall undertake a study to determine pre-construction baseline and post-construction levels of dissolved copper discharged from the overhead contact wire system to surface waters of the state. The scope of the study shall be approved by the Department prior to implementation. Representative sampling shall occur at a minimum of four (4) discharge points of stormwater from the operating light rail system to characterize the discharge.

A report detailing the findings of the study shall be submitted to the Department two (2) years after the system becomes operational. Depending on the findings of the report, the Department reserves the right to require AKART pre-treatment of the stormwater from the system to meet surface water criteria or a NPDES permit for operation of the system.

LAB ACCREDITATION

Laboratories used to prepare monitoring data shall be registered or accredited under the provisions of *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. Turbidity and pH may be measured in the field with properly calibrated meters.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S4 are based on the authority to specify any appropriate reporting and record-keeping requirements to prevent and control waste discharges (WAC 173-220-210).

STORMWATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION ACTIVITIES

Special Condition S6 requires a SWPPP for construction activity, including construction dewatering, to be prepared and implemented prior to the commencement of construction activity. The main objective of a SWPPP for construction activities is to prevent the contamination of stormwater from activities on the site. Selection and implementation of proper BMPs should minimize erosion and sediments from rainfall run-off at construction sites, and to identify, reduce, eliminate, or prevent the pollution of stormwater.

GENERAL CONDITIONS

General Conditions are based directly on state and federal law and regulations.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending, or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 prohibits the Permittee from using the permit as a basis for violating any laws, statutes, or regulations. Conditions G6 and G7 relate to permit renewal and transfer. Condition G8 prohibits the reintroduction of removed substances back into the effluent. Condition G9 requires the Permittee to submit all information the Department may need to determine whether cause exists to modify, revoke, and reissue or terminate the permit. Condition G10 incorporates by reference all other requirements of 40 CFR 122.41 and 122.42. Condition G11 notifies the Permittee that additional monitoring requirements may be established by the Department. Condition G12 requires the payment of permit fees. Condition G13 describes the penalties for violating permit conditions. Condition G14 provides the definition of an "Upset." Condition G15 states that the permit does not convey any property rights or any exclusive privilege. Condition G16 requires compliance with all conditions of this permit. Condition G17 requires compliance with effluent standards for toxic pollutants. G18 provides under the Clean Water Act that any person who falsifies, tampers with or knowingly renders inaccurate any monitoring device is subject to penalties and/or imprisonment. Condition G19 requires the Permittee to give prior notice to the Department of planned changes to facility production or processes. Condition G20 establishes the requirement to provide advance notification to the Department of anticipated noncompliance. Condition G21 requires the submittal of any relevant facts determined to have been omitted in original permit application. Condition G22 establishes compliance schedule reporting.

PERMIT ISSUANCE PROCEDURES

PERMIT MODIFICATIONS

The Department may modify this permit to impose numerical limitations, if necessary, to meet Water Quality Standards for Surface Waters, Sediment Quality Standards, or Water Quality Standards for Ground Waters, based on new information obtained from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies.

The Department may also modify this permit as a result of new or amended state or federal regulations.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics, protect human health, aquatic life, and the beneficial uses of waters of the state of Washington. This permit will expire five (5) years from its date of issuance.

REFERENCES FOR TEXT AND APPENDICES

Environmental Protection Agency (EPA)

1992. National Toxics Rule. Federal Register, V. 57, No. 246, Tuesday, December 22, 1992.

1991. Technical Support Document for Water Quality-based Toxics Control. EPA/505/2-90-001.

1985. Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Ground Water. EPA/600/6-85/002a.

1983. Water Quality Standards Handbook. USEPA Office of Water, Washington, D.C.

Washington State Department of Ecology.

1994. Permit Writer's Manual. Publication Number 92-109

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to issue a permit to the Central Puget Sound Transit Authority for construction of the Central Puget Sound Light Rail System. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public Notice of Applications (PNOA) was published on September 4, 2001, and September 11, 2001, in the *Seattle Times* to inform the public that an application had been submitted and to invite comment on the issuance of this permit.

The Department published a Public Notice of Draft (PNOD) on October 9, 2002, in the *Seattle Times* to inform the public that a draft permit and fact sheet were available for review. Interested persons were invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents were available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments were mailed to:

Water Quality Permit Coordinator
Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

The Department will consider all comments, in formulating a final determination to issue or revise the permit. Testimony and written comments submitted for the record will be addressed by Ecology in a responsiveness summary document included in the fact sheet. Only those comments which specifically address the proposed draft permit can be considered by Ecology at the Hearing, in the responsiveness summary, and in the development of the draft permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (425) 649-7060, or by writing to the address listed above.

This permit and fact sheet were written by Robert Wright.

APPENDIX B—DEFINITIONS

AKART— "AKART" is an acronym for "all known, available, and reasonable methods of prevention, control, and treatment." AKART shall represent the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants associated with a discharge. The concept of AKART applies to both point and nonpoint sources of pollution. The term "best management practices," typically applied to nonpoint source pollution controls is considered a subset of the AKART requirement. "The Stormwater Management Manual for the Puget Sound Basin" (1992), may be used as a guideline, to the extent appropriate, for developing best management practices to apply AKART for storm water discharges.

Best Management Practices (BMPs - general definition) means schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In this permit, BMPs are further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

Bypass means the diversion of waste streams from any portion of a treatment facility.

Clean Water Act (CWA) means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.

Combined Sewer means a sewer which has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance.

Constructed Wetland means wetlands intentionally created, on sites that are not natural wetlands, for the primary purpose of wastewater or stormwater treatment and managed as such. Constructed wetlands are normally considered as part of the stormwater collection and treatment system.

Construction Activity means clearing, grading, excavation, and any other activity which disturbs the surface of the land. Such activities may include road building; construction of residential houses, office buildings, industrial buildings, or rail systems; and demolition activity.

Construction Dewatering means the act of pumping ground water or stormwater away from an active construction site.

Detention means the temporary storage of stormwater to improve quality and/or to reduce the mass flow rate of discharge.

Director means the Director of the Washington Department of Ecology or his/her authorized representative.

Discharger means an owner or operator of any facility or activity subject to regulation under Chapter 90.48 RCW or the Federal Clean Water Act.

Domestic Wastewater means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such ground water infiltration or surface waters as may be present.

Ecology means the Washington Department of *Ecology*.

Equivalent BMPs means operational, source control, treatment, or innovative BMPs which result in equal or better quality of stormwater discharge to surface water or to ground water than BMPs selected from the SWMM.

Equivalent Stormwater Management Manual means a manual that has been deemed by Ecology as being equivalent to the SWMM.

Erosion means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

Erosion and Sediment Control BMPs means BMPs that are intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, and sediment traps and ponds. Erosion and sediment control BMPs are synonymous with stabilization and structural BMPs.

Erosion and Sediment Control Plan means a document which describes the potential for erosion and sedimentation problems, and explains and illustrates the measures which are to be taken to control those problems.

Final Stabilization means the completion of all soil disturbing activities at the site and the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures (such as riprap, gabions, or geo-textiles) which will prevent erosion.

"*40 CFR*" means Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

Ground Water means water in a saturated zone or stratum beneath the land surface or a surface water body.

Illicit discharge means any discharge that is not composed entirely of stormwater except discharges pursuant to a NPDES permit and discharges resulting from fire fighting activities.

Leachate means water or other liquid that has percolated through raw material, product or waste and contains substances in solution or suspension as a result of the contact with these materials.

Local Government means any county, city, or town having its own government for local affairs. *Municipality* means a political unit such as a city, town, or county; incorporated for local self-government.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of Ecology.

Point Source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure and container from which pollutants are or may be discharged to surface waters of the state. This term does not include return flows from irrigated agriculture. (See fact sheet for further explanation.)

Pollutant means the discharge of any of the following to waters of the state: dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste. This term does not include sewage from vessels within the meaning of section 312 of the FWPCA, nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the FWPCA.

Pollution means contamination or other alteration of the physical, chemical, or biological properties of waters of the state; including change in temperature, taste, color, turbidity, or odor of the waters; or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare; or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish or other aquatic life.

Process Wastewater means any water which, during manufacturing or processing, comes into direct contact or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Puget Sound Basin means the Puget Sound south of Admiralty Inlet (including Hood Canal and Saratoga Passage); the waters north to the Canadian border, including portions of the Strait of Georgia; the Strait of Juan de Fuca south of the Canadian border; and all the lands draining into these waters as mapped in Water Resources Inventory Areas numbers 1 through 19, set forth in WAC 173-500-040.

Sanitary Sewer means a sewer which is designed to convey domestic wastewater.

Sediment means the fragmented material that originates from the weathering and erosion of rocks or unconsolidated deposits, and is transported by, suspended in, or deposited by water.

Sedimentation means the depositing or formation of sediment.

SEPA (State Environmental Policy Act) means the Washington State Law, RCW 43.21C.020, intended to prevent or eliminate damage to the environment.

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Significant Amount means an amount of a pollutant in a discharge that is amenable to available and reasonable methods of prevention or treatment; or an amount of a pollutant that has a reasonable potential to cause a violation of surface or ground water quality or sediment management standards.

Significant Contributor of Pollutant(s) means a facility determined by Ecology to be a contributor of a significant amount(s) of a pollutant(s) to waters of the state of Washington.

Significant Materials include, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

Site means the land or water area where any "facility or activity" is physically located or conducted.

Source Control BMPs means physical, structural, or mechanical devices or facilities that are intended to prevent pollutants from entering stormwater. A few examples of source control BMPs are erosion control practices, maintenance of stormwater facilities, constructing roofs over storage and working areas, and directing wash water and similar discharges to the sanitary sewer or a dead end sump.

Stabilization means the application of appropriate BMPs to prevent the erosion of soils, such as temporary and permanent seeding, vegetative covers, mulching and matting, plastic covering and sodding. See also the definition of Erosion and Sediment Control BMPs.

Storm Sewer means a sewer that is designed to carry stormwater. Also called a storm drain.

Stormwater means rainfall and snow melt run-off.

Stormwater Drainage System means constructed and natural features which function together as a system to collect, convey, channel, hold, inhibit, retain, detain, infiltrate, or divert stormwater.

Stormwater Management Manual for the Puget Sound Basin (SWMM) or Manual means the technical manual prepared by Ecology for use by local governments and published in 2001, or statewide revisions when they become available, that contain descriptions of and design criteria for BMPs to prevent, control, or treat pollutants in stormwater.

Stormwater Pollution Prevention Plan (SWPPP) means a documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of stormwater.

Surface Waters of the State includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

Treatment BMPs means BMPs that are intended to remove pollutants from stormwater. A few examples of treatment BMPs are detention ponds, oil/water separators, biofiltration, and constructed wetlands.

USEPA means the United States Environmental Protection Agency.

Water Quality means the chemical, physical, and biological characteristics of water, usually with respect to its suitability for a particular purpose.

Waters of the State includes those waters as defined as "waters of the United States" in *40 CFR* Subpart 122.2 within the geographic boundaries of Washington State and "waters of the state" as defined in Chapter 90.48 RCW which include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

Acronyms

AKART	All known, available, and reasonable methods of prevention, control and treatment
BMP	Best Management Practice
CERCLA	Comprehensive Environmental Response Compensation & Liability Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
EPA	Environmental Protection Agency
ESC	Erosion and Sediment Control
FWPCA	Federal Water Pollution Control Act
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SWMM	Stormwater Management Manual for the Puget Sound Basin
SWPPP	Stormwater Pollution Prevention Plan
USC	United States Code
USEPA	United States Environmental Protection Agency
WAC	Washington Administrative Code
WQ	Water Quality

APPENDIX C—RESPONSIVENESS SUMMARY FOR THE CENTRAL PUGET SOUND TRANSIT AUTHORITY NPDES PERMIT

The Department only received comments from Central Puget Sound Transit Authority.

Once the Cleanup Action Plan has been completed at the maintenance base, there remains the potential for residual pollutants to mobilize during storm events and flow into conveyances which discharge to the Duwamish River. Monitoring of these pollutants will remain a necessity to ensure that known and suspected site contaminants are not discharging off-site.

Comment #1: ***Special Condition S1.B, "Discharge Prohibitions."*** The definition of process water should be revised to conform with the definition contained in the Permit Writer's Manual.

Response: *Special Condition S1.B is a description of prohibited discharges which may be associated with construction activites, not a definition of process water.*

Comment #2: Prohibited Discharge language pertaining to the voluntary cleanup site (VCP) should be changed to make it clear that the discharge prohibitions only apply to the VCP site and those prohibitions only apply until the cleanup is complete.

Response: *Language will be added to clarify that stormwater or dewatering water generated from the voluntary cleanup site will be authorized after the cleanup action is completed.*

Comment #3: ***Special Condition S1.C, "Stormwater and Uncontaminated Construction Dewatering Discharge."*** Surface Water Discharges: We suggest deleting the second sentence as it duplicates General Condition G16, "Duty to Comply."

Response: *The second sentence in Special Condition S1.C is standard language in all discharge permits.*

Comment #4: ***Special Condition S1.C, "Stormwater and Uncontaminated Construction Dewatering Discharge."*** Surface Water Discharges: The effluent limits should be deleted and replaced with benchmarks.

Response: The effluent limits established in this permit are the Water Quality Standards for Surface Waters of the state of Washington (chapter 173-201A WAC). Ecology uses this chapter to set effluent limits for conventional construction related parameters; pH, turbidity and Total Petroleum Hydrocarbon (TPH) for all Individual Construction Stormwater permits. WAC 173-201A-060(5) requires that waste discharge permits, whether issued pursuant to the National Pollutant Discharge Elimination System or otherwise, be conditioned so the authorized discharge will meet the water quality standards. WAC 173-201A-060(6) states that no waste discharge permit shall be issued which results in a violation of established water quality criteria, "except with a mixing zone."

Comment #5: ***Special Condition S1.C, "Stormwater and Uncontaminated Construction Dewatering Discharge."*** Groundwater Discharges: We have deleted the groundwater limits because we do not believe they are necessary or appropriate. This permit should not include groundwater conditions as it is a surface water discharge permit. To the extent that this condition is driven by the Independent Remedial Action Plan, the cleanup is being conducted to the specifications of a Cleanup Action Plan (CAP) that has been reviewed and approved by Ecology's Toxics Cleanup Program personnel. The CAP includes site-specific remediation goals which have been demonstrated to be protective of groundwater under the Model Toxics Cleanup Act.

Response: *The permit is both an NPDES permit and a State Waste Discharge permit. State Waste Discharge permits authorize discharges to groundwater. Ecology is obligated to require all NPDES permittees to comply with state of Washington Surface Water Quality Standards (chapter 173-201A), Sediment Management Standards (chapter 173-204 WAC), Ground Water Quality Standards (chapter 173-200), and human health-based criteria in the National Toxics Rule (Federal Register, Vol. 57, No. 246, Dec. 22, 1992, pages 60848-60923). This requirement is not driven by the Independent Remedial Action Plan. The requirement to protect ground water quality has been in all general and individual construction stormwater permits since 1992.*

Comment #6: ***Special Condition S2, "Compliance with Standards."*** We have added language clarifying what compliance with standards means in the context of this stormwater permit. With the exception of the last sentence, this language tracks the stormwater general permit for industrial activities, which is a permit that Ecology spent considerable time drafting. The last sentence simply states that Ecology will apply its mixing zone rules in determining compliance with the standards. We believe that it is important to have this language in the permit in order to have consistency with the fact sheet, which states that the dilution factor will be considered in the context of the monitoring plan.

Response: *The language used is essentially right out of the General Permit. The "points of compliance" for this project will be determined through the development, review, and approval of the monitoring plan.*

Comment #7: ***Special Condition S3.A, "Monitoring Requirements."*** Revise this condition to remove the requirement to sample upstream and downstream because much of this project will discharge stormwater to a stormwater conveyance system.

Response: *Special Condition S3.A, requires that a monitoring plan be developed and submitted to Ecology for approval. Since turbidity is a relational water quality standard, upstream/downstream sampling or other relational strategy will be necessary.*

Comment #8: The details of sampling are best determined in the monitoring plan, which is required in the permit as well.

Response: *It is agreed that the sampling details will be worked out in the monitoring plan that will be submitted to Ecology for approval.*

Comment #9: We have defined the rain event consistent with S6B.1.c and reduced sampling frequencies so that Sound Transit's expense in implementing this permit is closer to that of other construction stormwater permittees.

Response: *The rain event standard of "Within 24 hours of every ½-inch rainfall event" has been used for more than 5 years for construction stormwater runoff issues and is always used in Individual Construction Stormwater permits.*

Comment #10: ***Special Condition S1B, "Overhead Contact Wire Study."*** We believe that this condition should be deleted for several reasons. First, the study would occur after the permit expires and is therefore, inappropriate and premature to include in this permit. Second, this permit regulates stormwater associated with construction activities, not operational activities. Third, there is, to our knowledge, no requirement for any other rail facility in the State to conduct a study of this kind

Response: *This permit will remain in effect until all construction related activities are completed. It is our understanding that this phase of the Central Link Light Rail project is just an initial phase and that the plan is to extend the railway to the north and south. Therefore, the initial segment may be in operation while construction continues on the extensions. Copper can be toxic to aquatic organisms at concentrations as low as 6.33 parts per billion with a hardness of 35; therefore, the extent and magnitude of the copper discharges (if any) is required to be investigated.*

Comment #11: ***Special Condition S4.D, "Additional Monitoring."*** We have deleted the second paragraph after internal discussions and discussions with other NPDES permit holders. At best, it provides Ecology with no additional information to evaluate Sound Transit's compliance with this permit. At worst, it exposes Sound Transit for liability where none should exist. With a project of this magnitude, it is impossible for Sound Transit to monitor every contractor that might take a sample someplace on the project. The condition also discourages voluntary monitoring, which seems to run counter to environmental responsible behavior.

Response: *Additional monitoring provides greater assurance of compliance with surface water quality standards and effluent limitations. Special Condition S4.D, second paragraph is language that was added and modified based on previous comments from Central Puget Sound Transit Authority that this requirement should be for discharge monitoring only.*

Comment #12: ***S6B.2, "Monitoring Plan."*** We have removed the upstream and downstream sampling requirement because this project will often discharge to stormwater conveyance pipes rather than streams.

Response: *See response to comment #7.*

Comment #13: ***S6B.2, "Monitoring Plan."*** We request that the requirement for submitting modifications of the monitoring plan to Ecology be changed from 30 days to 10.

Response: *Ecology will change this requirement to 10 days.*

Comment #14: ***S6B.3, "Spill Plan."*** We have deleted language in this condition that goes beyond what is practicable or supported by this permit. For example, a requirement to store "all liquid products" on impervious surface with 110% containment is beyond any regulatory or legal requirement. Likewise, vandalism or "malicious tampering" requirements for "liquid products" is an extraordinarily broad mandate and simply beyond the scope of this or any other permit or law we are aware of. Sound Transit will agree to prepare a spill plan, but will not agree to any of the other language in this paragraph.

Response: *The requirement to store liquid products and wastes within adequate cover and containment has been a regulatory requirement for years. Pollution prevention is in the best interest of all parties and is required by RCW 90.48. Sound Transit is responsible for spills on its sites under this permit. All adequate spill plans will address strategies to minimize tampering and vandalism of chemical and petroleum products at construction sites.*

Comment #15: Sound Transit continues to believe that this project is appropriately regulated under the Construction Stormwater General Permit. We understand Ecology disagrees with that assessment and we are willing to accept a reasonable individual NPDES stormwater permit. We cannot, however be forced to incur the expense of conditions that no other similar construction project is held to. We hope that you will carefully consider and accept our suggested revisions to the permit.

Response: *Ecology has determined that linear construction projects that take longer than a year, discharge to multiple streams in different drainage basins and which encounter contaminated soils, cannot be adequately managed under a General Construction Stormwater permit. Ecology has not included conditions or requirements in this permit that have not been addressed or included in other construction stormwater permits in the past.*

Comment #16: ***General Condition G16, "Duty to Comply."*** Replace "the Clean Water Act" with "this permit."

Response: *The reason behind this request is not stated and no justification is provided. The general condition properly links the statutory authority to the NPDES permit.*

Comment #17: ***FACT SHEET, "Mixing Zones."*** Delete second sentence in second paragraph referring to historical violations of state water quality standards from construction sites.

Response: *Historically, a majority of construction sites have violated water quality standards with their stormwater discharges at one time or another.*

Comment #18: ***FACT SHEET, "Surface Water Quality Criteria."*** Replace "Criteria" with "Standards."

Response: *The reason behind this request is not stated and no justification is provided. The use of the term "Criteria" in this context is appropriate.*

Comment #19: ***FACT SHEET, "Surface Water Quality Criteria."*** Delete the second sentence in the first paragraph which refers to pollutants that might be expected in stormwater discharges from railway construction.

Response: *The pollutants that might be expected from construction activities are: turbidity, pH, and petroleum products.*

Comment #20: ***FACT SHEET, "Surface Water Quality Criteria."*** Delete the third sentence in the first paragraph which refers to pollutants that have been documented in the soils at the maintenance base.

Response: *The pollutants included in this sentence are from the Voluntary Cleanup Plan submitted by Sound Transit to Ecology's Toxic Cleanup Program.*

Comment #21: ***FACT SHEET, "The acute marine water quality standards for the following metals,"*** Delete all reference to acute water quality standards for Cadmium, Chromium, Copper, Lead, Nickel, and Zinc.

Response: *The reason behind this request is not stated and no justification is provided. Listing the numeric acute water quality standards for the metals known or suspected in the soils at the maintenance base is appropriate in this fact sheet.*

Comment #22: ***FACT SHEET, "The acute marine water quality standards for polychlorinated biphenyls,"*** Delete all reference to acute water quality standards for polychlorinated biphenyls (PCBs).

Response: *Listing the numeric acute water quality standards for PCBs that may be present in the soils at the maintenance base is appropriate in this fact sheet.*

Comment #23: ***FACT SHEET, "The water quality standards for petroleum products,"*** Delete all reference to RCW 90.56 and RCW 90.48 and the interpretation that a visible sheen is disallowed.

Response: *Clarifying the water quality standards for petroleum products is appropriate in this fact sheet.*

Comment #24: ***FACT SHEET, "Monitoring Requirements."*** Delete the second sentence of the second paragraph referring to the purpose of the monitoring plan.

Response: *Including an explanation of the purpose of the monitoring plan is appropriate in this fact sheet.*

Comment #25: ***FACT SHEET, "Monitoring Requirements."*** Delete the third and fourth sentence of the second paragraph referring to the monitoring parameters for the railway work and at the maintenance base.

Response: *The reason behind this request is not stated and no justification is provided. Monitoring for conventional parameters at the railway and station work is required by this permit. Some monitoring for metals, PAHs, and PCBs will be required and including this information in this fact sheet is appropriate.*

Comment #26: ***FACT SHEET, "Monitoring Requirements."*** Delete third and fourth paragraphs referring to the overhead wire study requirements.

Response: *Developing and implementing an overhead wire study will be required by this permit and an explanation of the requirements and purpose of the study is appropriate in this fact sheet.*

Comment #27: ***FACT SHEET, "Appendix A—Public Involvement Information."*** In the second sentence of first paragraph, delete "and effluent limitations."

Response: *Effluent limitations have been established in this permit.*